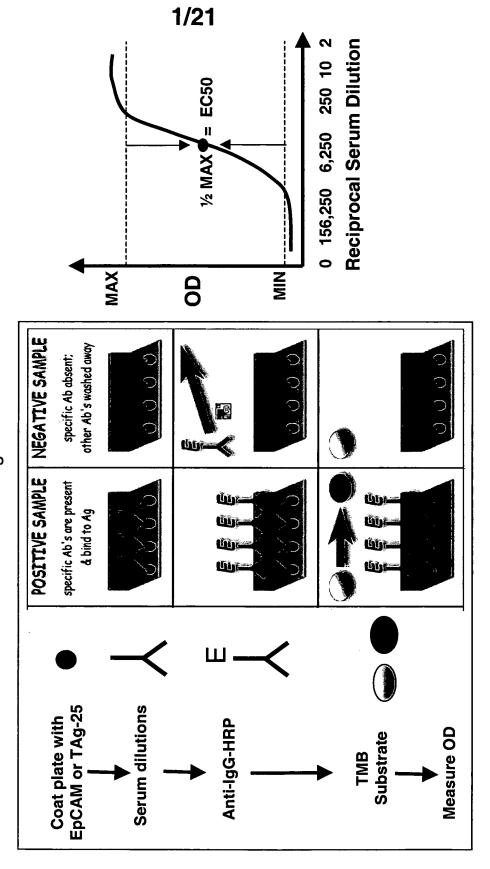


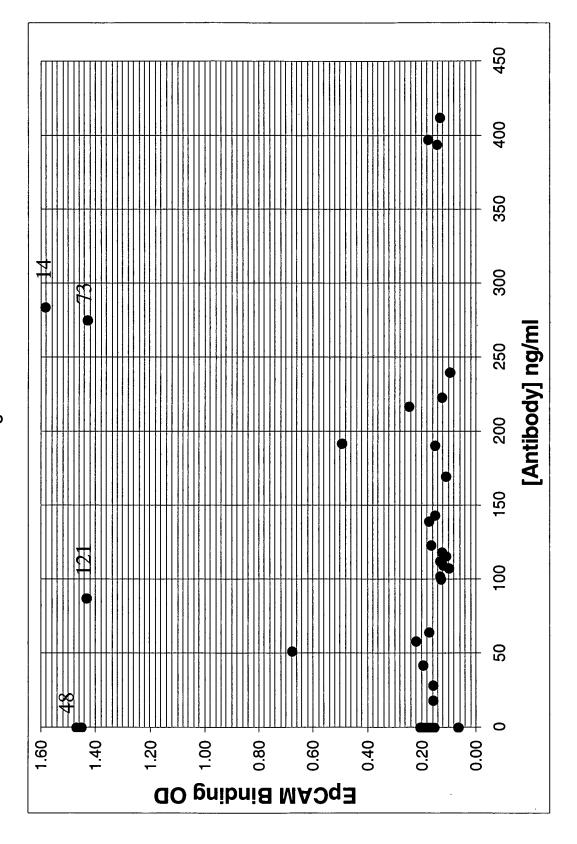
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Figure 1



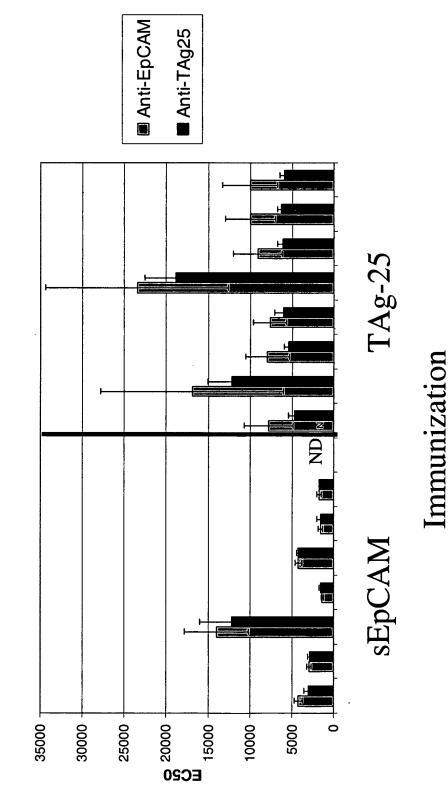
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Figure 2



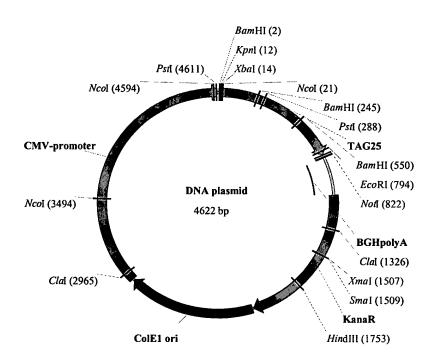
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Figure 3



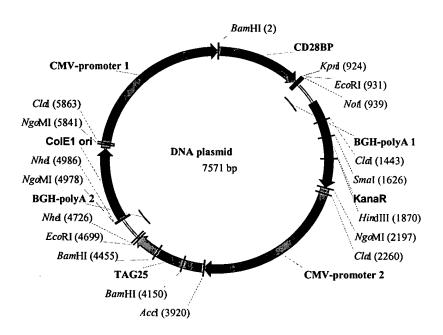
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Figure 4



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Figure 5



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Figure 6



pMaxVax_{sEpCAM:CD288P-15} bicistronic vector

pMaxVax_{sEpcAM} Monocistonic vector

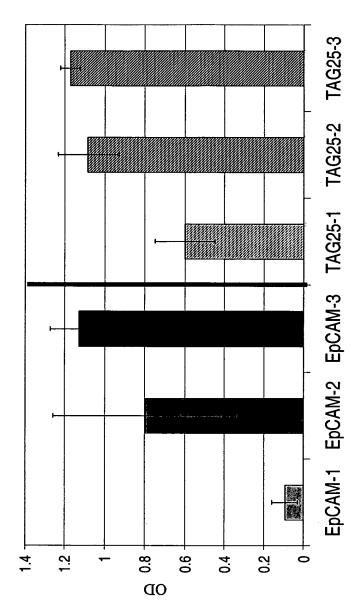


pMaxVax_{TAg-26:CD288P-16} bicistronic vector

pMaxVax_{TAg-25} monocistronic vector

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Figure 7



Immunization

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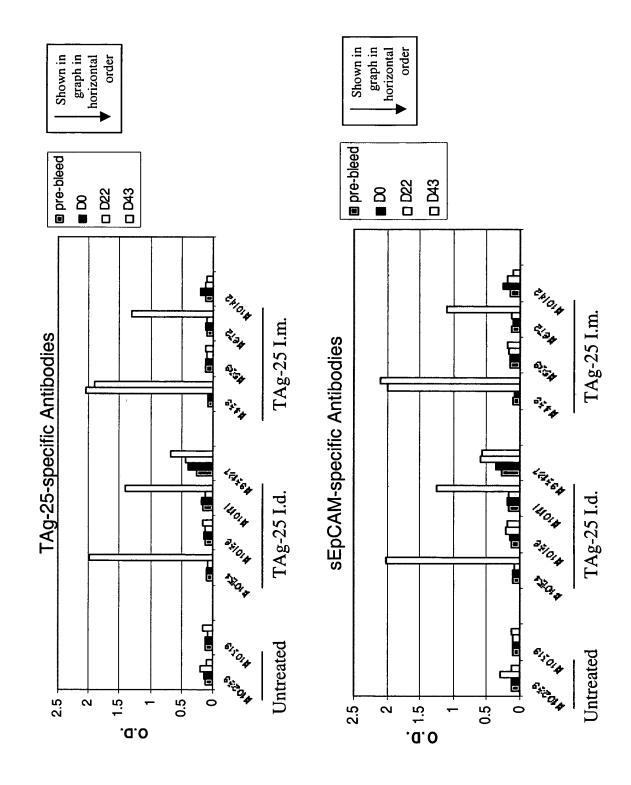
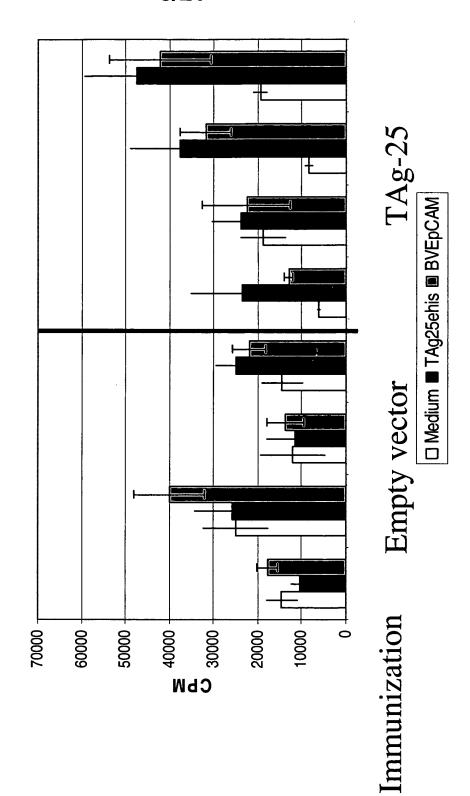


Figure 8

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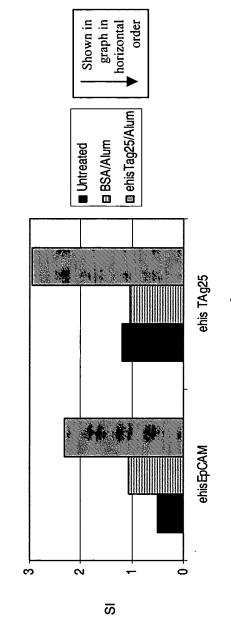
Figure 9A



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Figure 9B

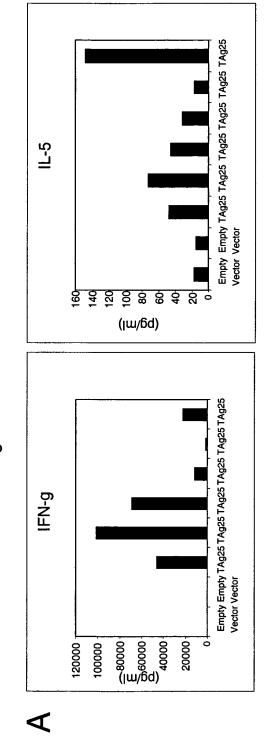
Protein Vaccine:

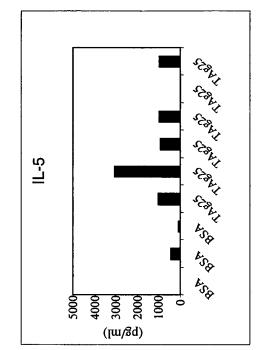


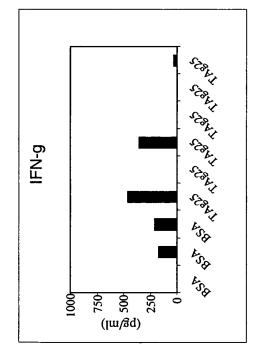
Stimulation in vitro

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Figures 10A and 10B







 \Box

Immunization

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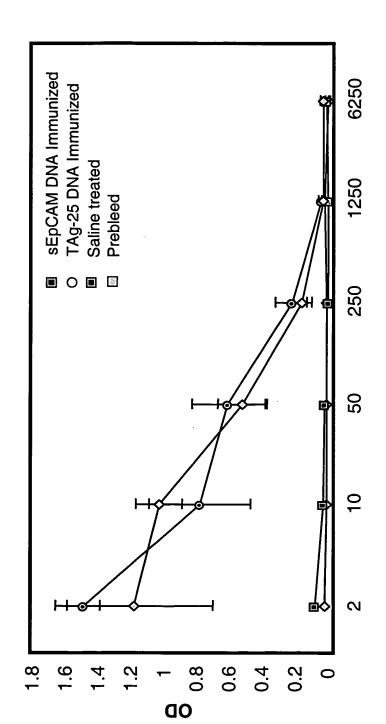
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Figure 11

		Pre-bl	peeld	1st l	1st DNA	2nd DNA	DNA	3rd DNA	NA	4th DNA	NA
PNQ		Responders	ш.	Responders	Responders	Responders	Responders	Responders	Responders	Responders Responders Responders Responders Responders Responders Responders Responders	Responders
Treatment	Route	to EpCAM	to TAg25	to EpCAM	to EpCAM to TAg25	to EpCAM	to TAg25	to EpCAM	to EpCAM to TAg25	to EpCAM	to TAg25
Saline	im	0	0	0	0	0	0	0	0	0	0
EpCAM	pi.	0	0	0	0	1	+	3	3	3	3
EpCAM	im	0	0	1	0	2	2	2	2	2	2
TAg25	þį	0	0	0	0	0	0	3	3	3	3
TAg25	im	0	0	0	1	1	1	4	4	4	4

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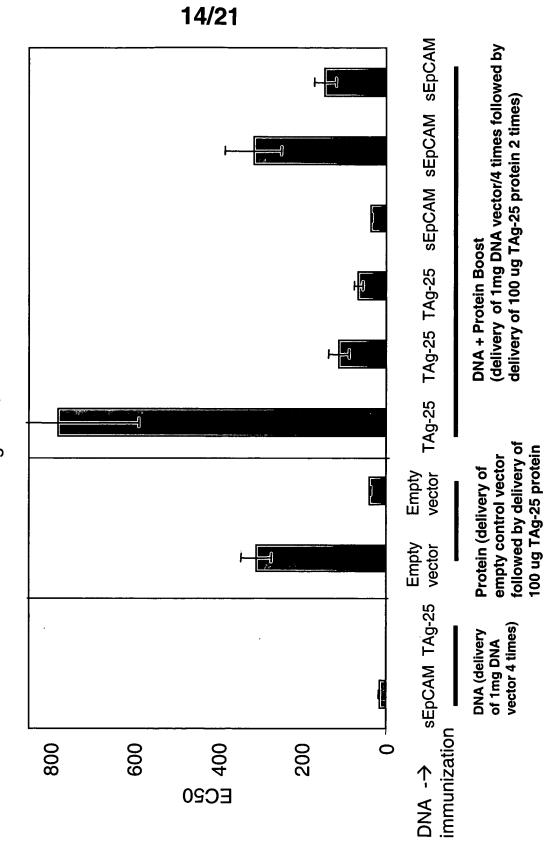
Figure 12



Reciprocal Serum Dilution after 4th immunization with DNA vector (1 mg/per dose)

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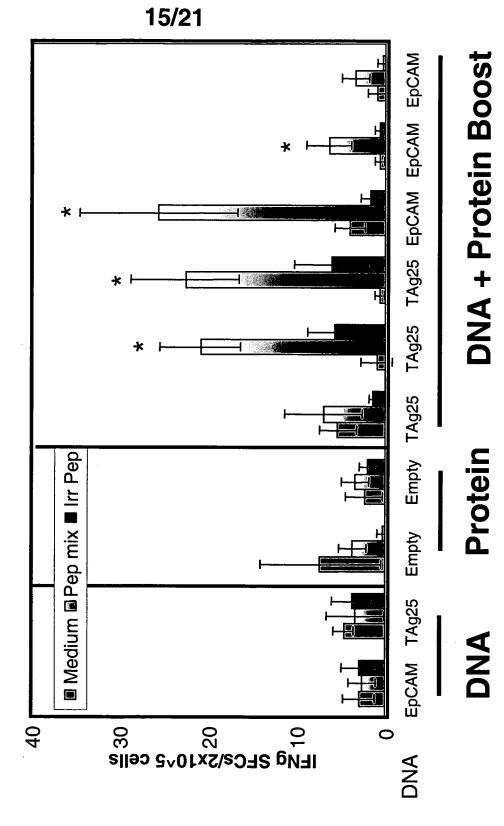
Figure 13



2 times)

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Figure 14

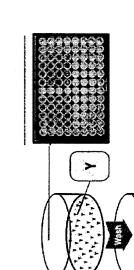


After Last Protein Boost

* Significantly higher than negative ctrl

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Figure 15



 Preactivate PBMCs +/- antigen in tubes (2x10⁶/ml) for 16-24hr

Block

Add cells in quadruplicates

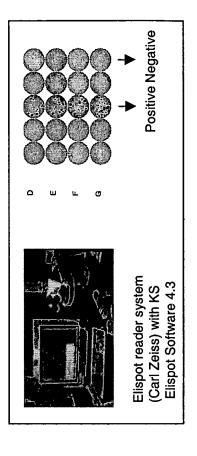
Biotinylated capture Ab

Streptavidin HRP

Substrate AEC

Ş

Readout: IFNγ Spot Forming Cells



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162 148 85 Figure 16 64 43 22 Bleed Day

100ug TAg25 protein in 2mg Alum Given to 20 monkeys previously 2x every 4wks; i.m. treated with DNA i.d.

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Macaca fascicularis Animal Species:

Empty vector i.m. or i.d. DNA immunizations (n=5):

2mg DNA 4x every 3 wks

- - FAg25 i.m. or i.d.
- TAg25/hB7.1 i.m. or i.d.
- FAg25/CD28BP i.m. or i.d. FAg25 + control DNA i.m.
- TAg25 + hB7.1 i.m.
- ⁻Ag25 + CD28BP i.m.

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TAg25/B71 TAg25/CD28BP (n=4)(n=4) Immunization i.d. Figure 17 TAg25 (u=2)Empty vector (n=4) 2 0.5 2.5 بن က

Stimulation index (c.p.m.)

Restimulation using a mixture of 9-11 $\alpha\alpha$ EpCAM-specific peptides

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Figure 18

Vaccine	Antigen-spec	Antigen-specific Response
Empty vector	9/2	9/2
TAG25	1/5	9/2
TAg25/B71	9/2	9/2
TAg25/CD28BP	3/5	2/5

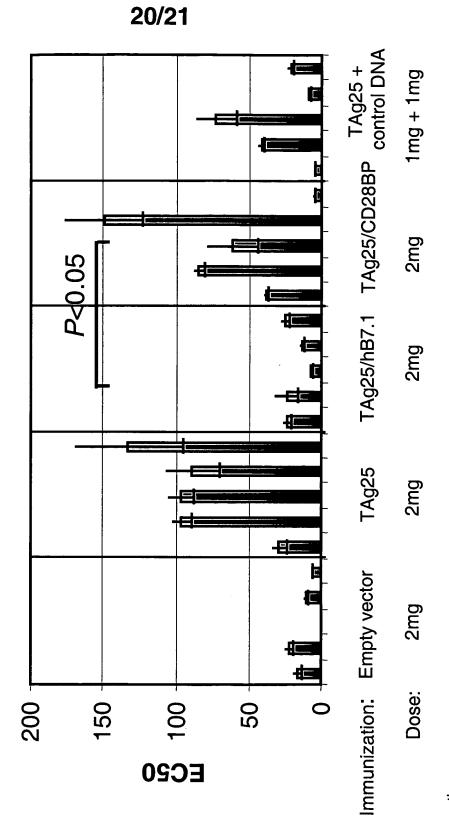
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Number of animals that are positive for restimulation with both Number of animals positive when restimulated with TAg25

TAG25 and EpCAM peptide mixture in separate cultures

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Figure 19



4th DNA

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Figure 20

